

Date: Sat, 27 Nov 93 04:30:34 PST
From: Ham-Equip Mailing List and Newsgroup <ham-equip@ucsd.edu>
Errors-To: Ham-Equip-Errors@UCSD.Edu
Reply-To: Ham-Equip@UCSD.Edu
Precedence: Bulk
Subject: Ham-Equip Digest V93 #114
To: Ham-Equip

Ham-Equip Digest Sat, 27 Nov 93 Volume 93 : Issue 114

Today's Topics:

Alkaline vs Nicad operating time
Best 2m handheld? (2 msgs)
Can modified DJ-580 do crossband repeat?
Crossband on Kenwood 741A ?
DJ-560T -> DJ-560E
Expanded receive for Yaesu 2700?
icom on construction job
Indestructable HTs? (2 msgs)
Kenwood 940 PLL Unlock problem
RS HTX202 Battery charger Replacements

Send Replies or notes for publication to: <Ham-Equip@UCSD.Edu>
Send subscription requests to: <Ham-Equip-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Equip Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-equip".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 27 Nov 93 04:54:20 GMT
From: ogicse!uwm.edu!vixen.cso.uiuc.edu!newsrelay.iastate.edu!news.iastate.edu!
tremple.gis.iastate.edu!willmore@network.ucsd.edu
Subject: Alkaline vs Nicad operating time
To: ham-equip@ucsd.edu

garym@alsys.com (Gary Morris @ignite) writes:

>The book gives a chart of battery charge life under a specified set of
>conditions. The interesting thing is the relative life of the Nicad packs,
>and AA packs with Alkaline or Manganese batteries. From the chart you can
>estimate the milliamp-hour rating of Alkaline and Manganese batteries.

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>          Battery Model          Charge Life
>          -----          -----
>AA Pack:   6 AA Alkalines        17 hrs  (about 2000 mAh)
>   6 AA Manganese  5.8 hrs (about 700 mAh)

>7.2v Ni-Cd Pack (200 mAh)  1.6 hrs
>7.2v Ni-Cd Pack (600 mAh)  5 hrs
>7.2v Ni-Cd Pack (1000 mAh) 11 hrs
>
>Using their ratings for the various packs (excluding the 1000 mAh pack) we
>can estimate that the Manganese batteries have a rating of around 700 mAh
>and that the Alkaline batteries have a rating of around 2000 mAh. The
>life of their 1000 mAh pack seems too long compared to the other packs.

>I would expect these ratings to vary with various brands of Alkaline
>batteries. Has anyone done any tests to measure mAh rating of various AA
>batteries?

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How about tech lit from the manufacturer? :) I just happen to have some lit from Eveready about their E91 (standard alkaline) and their L91 (the new 1.5V lithium). Here are the salient facts:

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Mass:  E91: 23 grams   L91: 14.5 grams
Voltage: Nominal  E91: 1.5V   Open Circuit  E91: 1.6V
          L91: 1.5V          L91: 1.8V
Operating time: Drain      E91 time      L91 time  (in hours to .9V)
                  1000    mA      0.4      2.0
                  300     mA      4.5      8.2
                  30      mA      72       83
                  .3 mA  8700      8700

Energy density:  1000    mA      1.2      5.1
(Whr/Cu in)      300    mA      3.4      6.6
                  30     mA      5.7      7.4
                  .3 mA  6.6      8.3

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Shelf life: E91: 5 years L91: 10 years

Let's see if I can extract this same style of information from the lit that they sent me about their NiCd batteries.

For a cell rated at 500mAh and designed for high discharge rates, the cell capacity is about 540mAh for discharge rates less than 1A. The capacity has dropped to about 433 at 2A.

Date: Wed, 24 Nov 1993 17:34:59 GMT

From: EU.net!ieunet!tcdcs!news.tcd.ie!unix2.tcd.ie!mdennehy@uunet.uu.net
Subject: Best 2m handheld?
To: ham-equip@ucsd.edu

In article <1993Nov21.110946.330@sfpp.com> longo@sfpp.com (Bob Longo) writes:

>>I just passed my Part 3A technician license and am awaiting my license. I
>>am now trying to figure out what handheld 2m (or possibly dual-band) radio
>>to buy.

>>

>>Is there one brand or model that stands out as the best? On the other side
>>of the coin - what should I stay away from and why?

In <1993Nov22.163942.23514@ke4zv.atl.ga.us> gary@ke4zv.atl.ga.us (Gary Coffman)
writes:

>I'm not going to answer your question directly, however. What I'm going
>to do is try to discourage you from making your first radio a handheld.
>Buy a mobile rig instead. You'll be happier, and everyone who has to
>listen to your signal will be happier.

I agree. I got my license about 2 years back and I wanted to get on the
air so much, that I got an Icom IC-02e. Since then it has come in handy
on 3 field days and for listening to the news on Sunday nights. Other
than that it's nearly impossible to get a sensible range of use - On one
occasion, I contacted a chap in Wales (just across the sea from here :-)
but I can't be heard in Bray, a town not 5 miles up the road. And that
is with a Slim Jim in the attic. The rubber duck is even more pathetic.
Save up and buy a multi-mode mobile. From all I was told and should have
heeded, It's a better buy all round.

Blue Skies ...

--

Mark "Rain Man" Dennehy, Ham Radio : EI5EDB (2m FM only) :-(
Engineering Undergrad, Internet : Mdennehy@Unix2.tcd.ie
Trinity College Dublin. Telepathy : Mdennehy@Mars.Red.Planet

Date: Mon, 22 Nov 1993 20:11:27 GMT
From: munnari.oz.au!spool.mu.edu!howland.reston.ans.net!agate!
headwall.Stanford.EDU!Csli!paulf@network.ucsd.edu
Subject: Best 2m handheld?
To: ham-equip@ucsd.edu

longo@sfpp.com (Bob Longo) writes:

>I just passed my Part 3A technician license and am awaiting my license. I
>am now trying to figure out what handheld 2m (or possibly dual-band) radio
>to buy.

First, Congratulations!

The best handheld for you will depend on a number of factors, and how you rank them. Among these:

- 1) Size: Do you need micro size or not?
- 2) Dual Banding: Do you really need both bands?
- 3) Extended Receive Coverage: Are you interested in scanning?
- 4) Ruggedness: Are you outdoors a lot? Do you drop things?
- 5) Battery Life: Do you intend to use your HT heavily?

#1 and #5 are usually traded off against each other. The "full size" HTs have bigger batteries, but they're not as convenient. #3 is useful if you like to listen to police and fire calls, but comes at the expense of good intermod rejection, which you'll likely need in a metropolitan area. For your first HT, you probably want 2 meters, as this tends to be the common denominator (some cynics say "least") of ham radio. Whether you want #2 will depend on how heavily the 70cm band is used in your area. #4 usually comes at the expense of #1, #2, and #3, as most ruggedized radios don't have all the neat gadgets that the others have.

So, figure out the features you want, and rank them. Chances are your choice will be obvious. If not, feel free to ask around again.

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--Paul Flaherty, N9FZX | "Fighter pilots make movies. Bomber pilots make
->paulf@Stanford.EDU | history." -- Jake Grafton

Date: 24 Nov 1993 14:29:43 GMT
From: munnari.oz.au!hp9000.csc.cuhk.hk!saimiri.prima.te.wisc.edu!sdd.hp.com!
cs.utexas.edu!swrinde!sgiblab!sgigate.sgi.com!olivea!inews.intel.com!ilx018-
bb.intel.com!ilx049!dbraun@network.ucsd.
Subject: Can modified DJ-580 do crossband repeat?
To: ham-equip@ucsd.edu

In article <CGr0oq.86v@rnivh.rni.sub.org>, torsten@rnivh.rni.sub.org (Torsten Leibold) writes:

|> Please POST the answer. I'm interested in it, too !

OK. It turns out that I goofed. When I was trying to turn on

cross-band repeat, the UHF band was in the 800 MHZ position. It will work only if both bands are in their "normal" frequency ranges. Thus you can't relay cellular phone conversations to the input of your local repeater :-(.

Another followup question: The corssband repeat always works both VHF->UHF and vice versa? So if there is activity on both frequencies, will the radio sort of randomly do either U->V or V->U, depending on which band hears first?

--

Doug Braun Intel Israel, Ltd. M/S: IDC1-41
 Tel: 011-972-4-655069 dbraun@inside.intel.com

Date: 24 Nov 93 13:55:52 -0700
From: ucsnews!sol.ctr.columbia.edu!usc!howland.reston.ans.net!mrtnt.ntns.com!
tntvax!rs2@network.ucsd.edu
Subject: Crossband on Kenwood 741A ?
To: ham-equip@ucsd.edu

If you have any ideas on how to do crossband operation on the Kenwood 741A, please send a direct message to me with phone nos. and hours I can reach you.

de Richard, W9RS

Please respond direct to: steck.richard@ntns.com

Date: Wed, 24 Nov 1993 14:46:43 GMT
From: ucsnews!sol.ctr.columbia.edu!usc!math.ohio-state.edu!uwm.edu!rpi!
newsserver.pixel.kodak.com!newsserver.raster.Kodak.COM!khk@network.ucsd.edu
Subject: DJ-560T -> DJ-560E
To: ham-equip@ucsd.edu

Is it possible to modify a DJ-560T (the model for the American market) so that it will become a DJ-560E (the model for the European market)?

Karl Heinz

If you want to answer via email, please do not reply to this message, use khk@raster.kodak.com. Our newsserver has problems with the return address.

--

Karl Heinz Kremer Performance Technology & Evaluation
Eastman Kodak Company, Department 294, 901 Elmgrove Road
Rochester, NY 16453-5810, USA FAX: +1-716-726-0374
EMail: khk@raster.kodak.com Phone: +1-716-726-7882

Date: 24 Nov 1993 16:28:27 GMT
From: munnari.oz.au!sgiblab!swrinde!elroy.jpl.nasa.gov!usc!news.bbn.com!
news.bbn.com!levin@network.ucsd.edu
Subject: Expanded receive for Yaesu 2700?
To: ham-equip@ucsd.edu

My "new" mobile is a Yaesu 2700 dual bander with ranges from 144 to 150(!) Mhz and 440 to 450 Mhz. Does anyone know of a way to expand the receiving capabilities (especially for the 2-meter side)? I'd like to be able to tune the 150+ Mhz public service band and if possible the NOAA weather frequencies.

(Transmit is not an issue, unless and until I join the MARS program.)

Thx / JBL KD10N

=

Nets: levin@bbn.com |
pots: (617)873-3463 |
KD10N (@KB4N.NH.USA) |

"I gotta go."
-- I. Shoales

Date: Fri, 26 Nov 1993 18:33:03 GMT
From: yuma!galen@purdue.edu
Subject: icoms on construction job
To: ham-equip@ucsd.edu

In article <1993Nov25.202556.28946@mnemosyne.cs.du.edu> rchalk@nyx10.cs.du.edu (richard chalk) writes:

>brian.oakley@pubcon.fort-worth.tx.us (BRIAN OAKLEY) writes:
>>did you check out which band the icoms were transmitting in? icom makes
>>radios that are type accepted for business use, marine use, aviation,
>>etc. not just ham. fyi 73. wb5kxw

>I've seen RS handhelds used by Chaperones at a High-school Band Competition.
>I asked about licenses, and they said "What licenses?" I have also heard of
>Race Car drivers using them. RS makes no real effort to control this.

RS has no responsibility to control the use of any product they sell, it's

the user that will be held responsible.

The chaperones may have been covered by a school districts' license. Our local district has bus freqs, maintenance freqs, building-to-building freqs for when the phones quit and probably a provision for using other freqs as conditions require.

As for the racing teams, they may be covered by a blanket license held by the track, the racing organization, or they may have their own.

The FCC is swamped by interference complaints, so enforcement of unused business band freqs is pretty low in priority.

I use an ICOM H-16 on amateur as well as our biz freqs, but I don't have the radio programmed for both simultaneously.

"Laws are only laws if someone enforces them." -- My Criminology Prof.
Galen, KF0YJ

Date: Wed, 24 Nov 1993 13:01:44 GMT
From: mdisea!mothost!lmpsbbs!news@uunet.uu.net
Subject: Indestructable HTs?
To: ham-equip@ucsd.edu

There is such an HT, but you probably can't afford it.

It would be Motorola's Ruggedized Saber line.

Probably about \$3000.00 or so.....

BTW - Most of the Motorola HT's will survive about everything you described with the exception of submersion.

73,
Bruce

Date: 24 Nov 1993 16:13:20 GMT
From: news.centerline.com!noc.near.net!jericho.mc.com!fugu!levine@uunet.uu.net
Subject: Indestructable HTs?
To: ham-equip@ucsd.edu

In article f5o@crchh941.bnr.ca, kharker@bnr.ca (Kenneth E. Harker) writes:

-->

--> I am wondering about something... what's the most "indestructable"

-->HT available? Is there one that could withstand not just being dropped,

Clearly the most indestructible HT is your favorite one covered by the ARRL's insurance.

Drop it from the top of the Empire State building and you end up with one in better shape than the one you dropped.

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  ||\\  ||  ||  ||  \\  ===  \\  ===  
  ||  \\  ||  //  ||  \\  //  \\  //    
  ||  \\  ||  //  ||  \\  //  \\  //
```

```
-----FTAC  
Bob Levine  KD1GG 7J1AIS VK2GYN          formerly KA1JFP  
levine@mc.com  <--Internet email    Phone(508) 256-1300 x247  
kd1gg@wa1phy.ma <--Packet Mail      FAX(508) 256-3599  
-----
```

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-----  
Date: 26 Nov 93 15:57:34 GMT  
From: ogicse!uwm.edu!spool.mu.edu!bloom-beacon.mit.edu!noc.near.net!  
news.delphi.com!usenet@network.ucsd.edu  
Subject: Kenwood 940 PLL Unlock problem  
To: ham-equip@ucsd.edu
```

Dick, I experienced the same problem. One of the VCOs in the synthesizer was not able to come up to the right frequency. I re-adjusted the coil, and presto! The symptom is much worse than the problem. Enjoy the rig when you get it back.73...Woody AK2F

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-----  
Date: Sat, 20 Nov 1993 07:31:54 GMT  
From: mentor.cc.purdue.edu!sage.cc.purdue.edu!blumb@purdue.edu  
Subject: RS HTX202 Battery charger Replacements  
To: ham-equip@ucsd.edu
```

Well, the battery charger I had acquired with my purchase of a used HTX202 died horribly. REALLY horribly. My thoughts are internal short circuit. I had to use an OVEN MITT to unplug the part that wasn't melting.

Anyways, the batterypack itself seems AOK.
Works fine, puts out spec. current/voltage.

Any alternative to ordering a charger thru Rat Shack?????

Is it really That Bad to use a nonRS charger?

--

Bill Blum N9VLS blumb@sage.cc.purdue.edu Purdue University, W. Lafayette, IN
Reality is for those who can't handle subscribing to IASFM and Model Railroader

Date: (null)

From: (null)

This just shows why alkaline batteries suck for ham use. If you just want to listen, alkalines are fine. If you intend to transmit, you are much better off with NiCd's. If you really are set on the idea of using a primary cell, the L91 is an excellent battery. Eveready has chosen to move it up to full production, so, with any luck, the price will drop from its current \$6.00 for a pack of 2 AA's to something more reasonable.

Date: (null)

From: (null)

Too bad they cost \$3/cell.

Cheers,

David (N0YMV)

--

willmore@iastate.edu | "Death before dishonor" | "Better dead than greek" |
David Willmore | "Ever noticed how much they look like orchids? Lovely!" |

End of Ham-Equip Digest V93 #114
